



GLOBAL PERSPECTIVES

8987/03/PRE

Paper 3 Presentation

May/June 2012

INSTRUCTIONS (Pre-Release Material)

To be given to candidates

READ THESE INSTRUCTIONS FIRST

Guidance for Teachers

This Resource Booklet contains stimulus material to be used by candidates preparing their presentation for 8987/03. One copy should be given to each candidate.

Presentations must be prepared in a four-week period. This may take place at any point before 31 May 2012, by which date all presentations must have been submitted to CIE via the MOVEit website.

The Presentation is marked out of 40.

Instructions to Candidates

- You should use the enclosed stimulus material to help you identify the subject for your presentation.
- Your presentation should attempt to answer a question.
- Your presentation must address alternative perspectives on the question you select and must engage directly with an issue, an assumption, a piece of evidence and/or a line of reasoning (explicit or implicit) in one or more of the documents within this Booklet (i.e. you should not just pick an individual word or phrase which is not central to the reasoning in or the issues covered by the documents).
- Include in your presentation an explanation of how it relates to these pre-release materials.
- Your presentation should be designed for a non-specialist audience.
- Originality in interpretation is welcomed.
- Your presentation may be prepared in a variety of formats (e.g. PowerPoint, weblog or web pages) and your submission must include a verbatim transcript of the presentation.
- The speaking or running time of your presentation should be a maximum of 15 minutes.
- All work must be your own. Any material that is not your own must be acknowledged, and quotations referenced.

This document consists of **12** printed pages.



Document 1

‘The world’s most valuable stuff.

Mostly because of farming, water is increasingly scarce. Managing it better could help.’

***The Economist*, a UK-based international news magazine, 20 May 2010**

PEOPLE kill each other over diamonds; countries go to war over oil. But the world’s most expensive commodities are worth nothing in the absence of water. Fresh water is essential for life, with no substitute. Although mostly un-priced, it is the most valuable stuff in the world.

Nature has decreed that the supply of water is fixed. Meanwhile demand rises inexorably as the world’s population increases and enriches itself. Homes, factories and offices are sucking up ever more. But it is the planet’s growing need for food (and the water involved in producing crops and meat) that matters most. Farming accounts for 70% of withdrawals.

Our special report this week looks at the increasingly visible consequences of the rising demand for water. Few of the world’s great rivers that run through grain-growing areas now reach the sea all the year round or, if they do, they do so as a trickle. Less obvious, though even more serious, are the withdrawals from underground aquifers, which are hidden from sight but big enough to produce changes in the Earth’s gravitational field that can be monitored by NASA’s satellites in space. Water tables are now falling in many parts of the world, including America, India and China.

So far the world has been spared a true water war, though the belligerency in Darfur comes close to being one, and competition for water can sometimes bring rivals together as well as drive them apart. But since over 60% of the world’s population lives in a river basin shared by two or more countries, the scope for squabbles is plain. Even if acute water shortages were to become widespread in just one country – India, say, or China – they could lead to mass migration and fighting.

Although the supply of water cannot be increased, mankind can use what there is better – in four ways. One is through the improvement of storage and delivery, by creating underground reservoirs, replacing leaking pipes, lining earth-bottomed canals, irrigating plants at their roots with just the right amount of water, and so on. A second route focuses on making farming less thirsty – for instance by growing newly bred, perhaps genetically modified, crops that are drought-resistant or higher-yielding. A third way is to invest in technologies to take the salt out of sea water and thus increase supply of the fresh stuff. The fourth is of a different kind: unleash the market on water-users and let the price mechanism bring supply and demand into balance. And once water is properly priced, trade will encourage well-watered countries to make water-intensive goods, and arid ones to make those that are water-light.

Solutions on tap

All four approaches have a part to play in the solution, but none is likely to end the over-drawing of water at all quickly. For instance, although crop yields may be improved by new technologies and even new breeds (especially following this week’s genome advance), no one has yet managed to produce plants that offer dramatically more crop per drop. Without such a breakthrough, growing more crops inevitably means losing more water, since each extra plant transpires water vapour into the atmosphere during photosynthesis.

Desalination looks more hopeful, since new technologies are being developed and prices are falling. But it is still expensive, especially in terms of energy use, which is why at present it provides only 0.4% of the world’s fresh water. It will undoubtedly add to the supply of drinking water, of the ultra-pure water required for some industrial processes, even of irrigation for high-value crops, especially if grown for export. But it won’t solve most farmers’ water problems.

Liquid assets

As for the market, when it approaches water it meets all sorts of obstacles: water is difficult to move, difficult to measure, difficult to price and often difficult to charge for, since many people think it should be free. Even in arid market economies where every drop is precious, the price of water seldom reflects scarcity. Trading in water rights may one day bring order to the 20m well-users in India, but not in time to feed the 1.4 billion Indian mouths expected by 2025.

If that is to be done, it will be done largely by managing demand. This is already beginning to happen in parts of both India and China, where farmers are learning how to measure the water they pump, how to use it to greatest effect and thus how to sustain aquifer levels. The urgent need now is to spread their principles and practices at home and to other countries.

Even if the world manages to limit depletion, many water-related problems will persist. About 1 billion people are still without access to a decent water supply, while others suffer from flooding, pollution and poor sanitation. Yet if man wants to solve these problems, he can. He has applied far more money and know-how to issues far less important than the shortage of water. And if he does tackle them successfully, the big causes of human suffering – disease and poverty – will be automatically alleviated. Investing more thought and cash in the better use of the world's most valuable commodity is surely worthwhile.

[<http://www.economist.com/node/16163366>]

Document 2

Extracts from 'The Pain of Water.'

A speech by Loïc Fauchon, President of the World Water Council, given to the 15th African Water Association Congress, 15 March 2010

What unites us, what brings us together is a common will to eradicate what I call the 'pain of water', the pain that so many African men and women experience every day because they do not have access to water and sanitation.

The first challenge we must face today is demographic growth, especially in Africa with one billion inhabitants today and twice as many in 2050.

The second challenge lies in controlling rapid urbanization and growing tensions in coastal areas, with increasingly large and numerous mega-cities. These mega-cities have enormous domestic and industrial water needs which create severe and hazardous pollution downstream – so many time bombs that cannot be easily defused.

The third challenge is obviously the food crisis. Population growth, improving living standards, changes in eating habits, all contribute to an increase in water demand in agriculture. This results in significant waste water production and overall water loss which adds to increasing tensions over water resources. And of course, climate change could add to these enormous challenges.

At this very time in the history of mankind, we are faced with a major challenge: to enhance the value of water resources, and to protect them. The use of water is not confined to humans and human activities alone. Hence, a harmonious, albeit rigorous way to share water between humans and nature, must be reached and maintained.

This is why I reiterate that "the time of easy water is over". We have understood that future action in the field of water will be based on two key principles:

First, the future of water does not only rest on technological progress, but increasingly on political commitments.

Second, resolving tensions over water resources does not only rest on increasing water supply, but more and more on regulating water demand. This regulation implies a fundamental change in habits and behaviours.

In order to achieve this, we must establish a stronger relationship between water and energy. Today, on behalf of the World Water Council, I would like to suggest that you select in Africa, country by country, theme by theme, ten of the most realistic innovative solutions. Together we will seek funds for implementing these new solutions. One thing is certain: we need more money for water and energy in Africa.

Other important issues are the maintenance of water facilities, and the provision of institutions that can both develop and maintain capacity. The governance issue is also essential, because there is not just one, but several models of governance in Africa.

Help us identify these solutions and the ways to implement them. Be more than ever the "voices of water" that will speak for Africa. My dear friends, let's give water a chance.

[<http://www.watermediacenter.org/index.php?id=2531&p=105>]

Document 3

Adapted from ‘Billionaire Thugs Plot To Steal California’s Water And Everything They Tell You Is A Lie.’

A blog on a news website now based in the US, 8 January 2010

Yasha Levine

We’ve been lied to for years now about the severity of California’s water shortage. The media and state officials have been ringing the alarm, warning that the state was in the grips of quite possibly the “worst California drought in modern history,” when in fact the state nearly pulled in its average rainfall in 2009. The fear-mongering is about to go into overdrive, as powerful interests start whipping up fears of drought, setting up the Golden State for a corporate water grab.

One of the big boosters promoting the drought scare is Governor Schwarzenegger, who declared a state of emergency in early 2009, and promised to reduce water deliveries across the state by a whopping 80 percent.

Such a huge cutback is alarming for a state in which most of the population lives hundreds of miles away from water sources and is dependent on a gargantuan aqueduct system for basic survival. So journalists seized on this juicy disaster-in-progress story, hitting their readers with heavy-handed images of drought and suffering that seemed more in line with something filed on a UN humanitarian mission in Somalia than news from the heart of California.

Has the drought really been that bad? According to the November/December 2009 issue of *Mother Jones*, yes, it has: “Farmers are selling prized almond trees for firewood, fields are reverting to weed, and farm workers who once fled droughts in Mexico are overwhelming food banks. In short, the valley is becoming what an earlier generation of refugees thought they’d escaped: an ecological catastrophe in the middle of a social and economic one – a 21st century Dust Bowl.” A *60 Minutes* recent segment on California’s water crisis agreed, proclaiming: “You don’t have to go to Africa or the Middle East to see how much the planet is running dry. Just go to California.” *The New York Times*, *Los Angeles Times*, McClatchy’s, the *Wall Street Journal* – all have sung the same tune.

When left, right, print, broadcast and mainstream media outlets agree, it has to be true, right? Well, not exactly. Here’s what an end-of-the-year update published in November 2009 by the US Bureau of Reclamation had to say about the drought: precipitation in 2009 was about 94 percent of average in Northern California, which is pretty much the only region that matters since it is where three-quarters of the state’s water comes from. Ninety-four percent of average? That does not sound like severe drought conditions at all. But don’t tell that to California’s Department of Water Resources, which still has a huge “Drought Condition Severe” orange alert plastered on its Web site.

The power of simple fact-checking aside, why would California officials exaggerate – if not outright lie – about the drought? Well, the issue here is less about the drought itself and more about what a drought – real or not – can help achieve. If there is one thing 2009 revealed about California’s “action hero” governor, it’s that he is eagerly willing to serve as the front man for the sleaziest, most crooked business cartel in the state: a *de facto* water oligarchy made up of billionaire corporate farmers who run vast stretches of the state like their own personal fiefdoms, exploiting migrant workers for slave labor and soaking the taxpayers for billions of dollars in subsidies every year. And like all good businessmen, they aren’t letting a good mini-crisis go to waste. Their objective is to whip up fears of a drought-related calamity to push through a “solution” they’ve been dreaming about for the past five decades: a multi-billion-dollar aqueduct the width of the Panama Canal that would give them near total control of more than half of California’s water supplies.

In the convoluted world of California water politics, nothing is ever what it seems. And this time, it appears that even the most well-meaning of journalists fighting the good fight fell hook, line and sinker for the propaganda spun out by California’s well-greased water oligarchy. But if everyone got something

as basic as the premise of California's supposed water crisis – the drought – wrong, what else did they miss? Turns out, quite a bit. With no real drought in California, a lot of the myths, falsehoods and outright lies meant to stir up the masses might no longer make sense. On the other hand, just because the state has rain doesn't mean the state can't run out of water, not with the way corporate farmers are ramping up the pumping of the state's increasingly-overtapped water supplies. So here are some key myths about water:

Myth: Urban water conservation is key in protecting California's water resources

Schwarzenegger's mandate that urban water use be cut by 20 percent has earned the governor a lot of green cred, but few people realize that his plan for water conservation is actually a forced wealth transfer scheme in an environmentalist disguise. Conservation is a good idea, but it won't do much good for California, no matter how diligent residents are about turning off the tap while brushing or the number of low-flush toilets they install, not unless farmers are forced to conserve water as well.

It is a simple matter of discrimination. Why is the agricultural industry exempted from mandatory conservation when it consumes an unreal 80 percent of California's water? There won't be much conservation going on even if every living soul in California up and moves to another state. Because no matter how much water city dwellers save, it'll be sucked up by wealthy corporate farmers who are always on the lookout for more taxpayer-subsidized wet wealth. And with water trading for a minimum at ten times what they pay for it on the open market, every gallon a city dweller conserves will end up as cash in the personal bank account of some wealthy corporate farmers. It's all part of the master plan because, even as the governor talks up urban conservation, he tries his darnedest to get them more water.

Myth: Water shortages threaten to wipe out California's agricultural industry, causing a chain reaction that will cripple the state's economy and raise food prices around the country, maybe even the world

It's true, a total meltdown of California's agricultural industry, the largest in the United States, would be bad news for everyone involved. But the problem with this apocalyptic domino effect, which pops up as a talking point on Schwarzenegger's press releases and is parroted by the likes of Bloomberg and the *Wall Street Journal*, is a pesky thing called reality. Most irrigation districts have been getting their water on schedule. And because the drought has only affected a tiny sliver – about two percent – of California's total farmland, most of which happens to be some of the most heavily-subsidized growing operations in the state, any "multiplier effect" is bound to be limited, if noticeable at all.

Take Westlands Water District, where a sizable chunk of the state's fallowed farmland is concentrated. The district produces about \$1 billion in gross income a year, \$750 million of which is funded by water subsidies. Add to that hundreds of millions more in direct crop subsidies, and pretty soon the government ends up funding most, if not all of Westlands' economic output. Even if Westlands farmers weren't such welfare queens, it would be hard to get worked up even if the entire old billionaire club went under. After all, their entire output amounts to one-half of one percent of California's \$1.8 trillion. And we're not talking about missing out on vital crops here: who'd even notice an uptick in almond prices?

<http://exiledonline.com/billionaire-thugs-plot-to-steal-your-water-and-why-everything-you-know-about-californias-drought-is-wrong/>

Document 4**Adapted from 'The Human Rights Based Approach to Development.'****A report produced by the charity Water Aid for a UN workshop in Georgia, 2004**

A human rights approach to development is one which:

- puts people first and promotes human-centred development
- stresses liberty, equality and empowerment
- recognises the inherent dignity of every human being without distinction
- recognises and promotes equality between women and men, between minority and majority
- promotes equal opportunities and choices for all so that everyone can develop their unique potential and have a chance to contribute to development and society
- promotes national and international systems based on economic equity, equitable access to public resources, and social justice
- promotes mutual respect between peoples as a basis for justice and conflict prevention and resolution.

Such an approach would identify the plight of people with disabilities unable to collect their own water or access public sanitation facilities. It would highlight the problems facing the elderly, particularly widowers and widows. It will also point to the fact that poor people who have lost their families, whether through conflict or natural disaster, are particularly vulnerable in urban areas where they may be unable to rely on the kind of community support more usual in rural areas.

We believe that water and sanitation make a vital contribution to poverty elimination. A lack of water and sanitation clearly has an impact on the enjoyment of other human rights, such as the rights to education, health and work, which form such an essential basis for poverty elimination and human development.

There is an emerging international consensus on the issues of water management including agreement that:

- Water is key to development
- Water is a key social and economic resource for any nation
- The right to water must be protected for equity as well as sustainable development
- Water is key to improved health, improved nutrition and quality of life
- The private-public partnership is essential for development of the water resources
- Community based management is essential to conserve, properly utilise and develop water resources
- Sustainable water resource development is possible only through an integrated approach to soil, water, forest and livestock.

This final point of sustainability is also important in the context of protecting the rights of future generations to sustainability of the world's water resources and to inherit a clean and healthy environment.

Document 5

Adapted from 'Why development aid has failed.'

An article on the website of a UK-based libertarian think tank, April 2010
Sam Bowman

Britain's international development policymakers should heed the medical maxim *primum non nocere* – first, do no harm. The most important consideration for the future must be to avoid making the situation in Africa worse than it already is.

Development aid has been central to UK development policy since decolonization in the 1960s. The purpose of this aid was to help recipients grow economically, but it has had the opposite effect – with few exceptions, African countries' economic performance has diverged from the rest of the world since the 1960s.

Development aid has had damaging unforeseen consequences because it is a top-down solution. Development policies are conceived in European capitals, far removed from the places where they will be implemented. This often has tragic and ludicrous consequences, such as gifts of mosquito nets to African countries driving the indigenous mosquito net industries out of business. William Easterly discusses a similar case of free mosquito nets being misused as wedding dresses, among other things.

Humanitarian aid can have particularly dangerous consequences, with food aid undercutting local farmers and prolonging famines. Top-down solutions can never take into account the countless unforeseeable results of their actions, and frequently cause more harm than good.

Aid props up tyrannical governments who would otherwise collapse under the weight of their own imploding economies. Cash injections from the West, even if earmarked for worthy projects, can be diverted to the military and corrupt projects. The 1985 famine that Live Aid was held to relieve was caused by the Ethiopian government's war against domestic opposition. Recent allegations suggest that the Ethiopian government and rebel groups appropriated the aid raised by the concert, exacerbating the famine in the long run. These perverse consequences of a seemingly noble event like Live Aid demonstrate how easily aid money can be misused.

Africa in particular has suffered from governments that have implemented extremely harmful interventionist and collectivist policies (such as in Tanzania, Ethiopia and Zimbabwe) that have inhibited wealth creation. By rewarding poverty with aid, African governments have had no incentive to encourage growth in their own states and have become more dependent for money on the whims of Western donors than on the economic health of their people. They have thus had no incentive to promote wealth-creating policies in their own countries. The thinking behind development aid is economically misguided: businesses and entrepreneurs create wealth, not governments.

Does all this mean that Britain should give up its efforts to help eliminate poverty? No – but there is a fundamental problem with the current aid-heavy approach to international development.

[<http://www.adamsmith.org/publications/economy/an-international-development-policy-that-works/>]

Document 6

Adapted from 'Nile Water Politics: Uganda in Dilemma.'

An article on the website of a Mauritius-based online distributor of African news, 19 May 2009
Gerald Tenywa

The first time he heard about shadoofs was way back in school. His teacher demonstrated it as a simple device used to raise water from one level to another. He explained it as an ancient technology used in Egypt for raising water for irrigation from the River Nile.

It stuck in the mind of Amon Muzoora, a former MP of Rwampara. "It had a pole that looked like a see-saw. The suspended pole had a stone at one end and a bucket at the other," Muzoora tells of his school lesson that left him amazed. But when his turn came to visit Egypt, he did not find the shadoofs. Egyptians have evolved superior technologies such as the Aswan High Dam to irrigate the vast desert. However, the technology has come with many challenges that have given sleepless nights to politicians in Egypt and other countries sharing the Nile.

"Can you imagine that Uganda and other countries which harbour the source of all this water cannot command responsibility and authority over the Nile?" asked Muzoora. "We need to come together to do something about this kind of unfairness."

Under the 1929 agreement which was re-affirmed in 1959, no person or persons, companies or government shall build dams without the permission of the Egyptians.

"This means that if you want to use water from Kyoga to irrigate, you cannot proceed until the Egyptians consent," he says. "In the Nile agreements, there is no water left for Uganda and other countries to use for irrigation."

In the 1959 agreement between Egypt and Sudan, Egypt walked away with 70% (55.5 billion cubic metres of water) and Sudan took 30% (18.5 billion cubic metres of water) of the Nile water.

Other agreements relating to the Nile assumed that the upper river states did not need the Nile for irrigation. "The basic assumption here was that the upper basin states would always use rain-fed agriculture," says a report. "This led to the attempt by the lower most river states to appropriate all the waters of the Nile, thereby ignoring the interests of the upper river states."

Muzoora stood up against the lopsided agreements and moved a motion in Parliament to repeal colonial laws on the Nile. He was stepping in the footsteps of Tanzania's former president Julius Nyerere, who declared that the treaties were null and void.

"I moved a motion in Parliament because all the agreements were not in the interest of Uganda," says Muzoora. "But there were people who were sharing the same bed with Egypt; I left Parliament before the issue was concluded."

Egypt needs to use the world's longest river flowing about 6,677km through eastern Africa to the Mediterranean Sea in northeast Egypt to turn the desert into arable land. The mainstream headwaters; the Blue Nile and the White Nile, meet at Khartoum in Sudan to form the Nile proper.

The population in Egypt has tripled to 72 million people and now needs between 73 and 79 billion cubic metres of water to serve its farmers, who use less than 10% of the country's total land area. The water allocated to Egypt under the Nile agreement is only 55 billion cubic metres annually.

A new agreement on the Nile is being discussed. All countries have to agree on the Nile Cooperative Framework. "The Nile river is ours. All of us are in the Nile basin and should work hard to maintain a good relationship," says Reda Bebars, the ambassador of Egypt. "We will give the Nile Basin Initiative and Uganda all the support they need. No dream is too big to achieve."

Muzoora does not agree: "Anyone in Egypt or Sudan who would sign the new agreement on the Nile would lose his political base," he says. Muzoora says the agenda of the Egyptians is a much bigger one. "It needs people who understand international politics and water issues," he says.

[<http://allafrica.com/stories/200905200289.html>]

Document 7

Adapted from 'Enough is not enough. It must also be clean.'

A special report on water in *The Economist*, a UK-based international news magazine, 20 May 2010

If water has the capacity to enhance life, its absence has the capacity to make it miserable. David Gray, a water practitioner who has served the World Bank in almost every river basin on the globe and is now a professor at Oxford, has a technique that makes the point. Every day he receives e-mails with water stories from newspapers round the world. By briefly displaying to an audience just one day's crop – including, say, drought in Australia, floods in Kenya, an empty dam in Pakistan, a toxic spill in the Yellow River and saltwater contamination in Haiti – he can soon show how water may dominate if not destroy lives, especially in poor countries.

Some of its most pernicious influences, though, never make the headlines. This is how they might read: "Over 1.2 billion people have to defecate in the open." "The biggest single cause of child deaths is diarrhoea or diseases related to it." "Nearly 1 billion people have no access to piped drinking water or safe taps or wells." Each of these statements is linked to water.

Surprisingly, some of those who have to defecate in the open do not mind. Some rural men, and even women, quite enjoy a social squat in the bushes. But for many, and certainly for those who must live with its consequences, it is a disagreeable practice. Women and, especially, girls often find it embarrassing. Many women in South Asia contain themselves by day and wait till nightfall before venturing into the shadows. Girls at African schools without latrines often drop out rather than risk the jeers of their male contemporaries. Slum-dwellers in Nairobi have to pick their way through streams of sewage and take care to avoid "flying toilets", plastic bags filled with excrement that are flung with desperate abandon into the night.

Without piped water to wash their hands with, let alone to drink, the open-air defecators and another 800m people with access only to primitive latrines are inevitably carriers of disease. If they could wash their hands with soap and water, they could block one of the main transmission routes for the spread of both diarrhoeal diseases and respiratory infections. As it is, patients with water-related diseases fill half the hospital beds in the poorest countries, and dirty water and poor sanitation kills 5000 children a day.

Clean water is crucial for children with diarrhoea; they need rehydration and electrolytes to survive. Even then, they may still be at risk of malnutrition if they continue to suffer from diarrhoea, which will prevent them from absorbing their food properly. This usually has long-term consequences. Malnutrition in the womb and during the first two years of life is now seen as causing irreversible changes that lead to lifelong poor health.

Poor health, bad in itself, translates into poor economic output.

The cost to health and wealth

Studies in Ghana and Pakistan suggest that the long-term impact of malnutrition associated with diarrhoeal infections costs each country 4%-5% of GDP. This can be added to a similar burden for "environmental risk", which includes malaria and poor access to water and sanitation, both water-related, as well as indoor air pollution. All in all, the World Health Organisation thinks that half the consequences of malnutrition are caused by inadequate water, sanitation and hygiene. In Ghana and Pakistan the total cost of these shortcomings may amount to 9% of GDP, and these two countries are not unique.

The problem is not strictly a matter of water scarcity. Indeed, expanding the availability of water may actually increase disease, since it may lead to stagnant pools in which mosquitoes breed, and then spread malaria or dengue fever; or perhaps excess water will run through human or toxic waste and thus contaminate the ground or a nearby stream. So hygiene and protected storage are essential.

Yet there is a shortage of safe water for drinking and sanitation in many places, not least in the cities to which so many people are now flocking. Africa is urbanising faster than any other continent, and most migrants to the towns there find themselves living in slums. In cities like Addis Ababa and Lagos a quarter to a half of the population have no access to decent sanitation, and not many more will have access to piped water. No Indian city has a 24-hour domestic water supply, though efforts are under way to provide it in Mysore and a few other places.

Nearly two-fifths of the United States' 25,000 sewer systems illegally discharged raw sewage or other nasty stuff into rivers or lakes in 2007–09, and over 40% of the country's waters are considered dangerously polluted. Contaminated water lays low almost 20 million Americans a year.

A concerted international effort is now under way to improve sanitation and the supply of drinking water. One of the development goals set by the United Nations at the millennium was to halve the proportion of people without basic sanitation and a decent source of fresh water by 2015. Progress is slow, especially for sanitation, and particularly in Africa, and increasingly policymakers are finding that heavily subsidised projects are failing.

Sexy loos

Outfits like the World Toilet Organisation, based in Singapore, now believe you have to make lavatories "as sexy as mobile phones" if you are to get people to accept them, and that means literally selling them. Once people have invested some of their own money in a loo, they will use it. The World Bank confirms that the most successful sanitation projects involve only a small subsidy.

Where building a fixed latrine is not possible – slum-dwellers seldom own the land they live on, or have much incentive to improve a site to which they have no legal rights – entrepreneurs may help out. The Peepoo is a personal, single-use bag that the Swedish founder of the company, Anders Wilhelmsen, describes as the hygienic version of Nairobi's flying toilet, intended, to begin with, for the same Kenyan users. Sealed by knotting, it acts as a micro treatment plant to break down the excreta. Since the bag is made of degradable bio-plastic, when it has served its primary purpose it can be sold with its contents as fertiliser. Indeed, the hope is that a market will develop in which the same people will trade in the bags before and after use. Each will sell for 5-7 cents, about the same as a conventional plastic bag, and though a subsidy will be needed at first, the operation is meant to become self-sustaining, and indeed profitable.

Private enterprise also has a role in the provision of safe drinking water. A large market in home water-purifiers now exists all over the world. But a typical one, using reverse osmosis, may cost at least \$170 in a country like India. Kevin McGovern, a self-described pro bono capitalist from New York, wants to bring cheaper purifiers to the poor. His company, the Water Initiative, has developed a filtering device that takes all the nasties out of water in the home and needs to be replaced only once a year. Unlike osmosis, it consumes no energy, and every drop of incoming water can be used for drinking.

The first country Mr McGovern has in his sights is Mexico, the second-biggest consumer of bottled water in the world because of the high incidence of arsenic, fluoride and pathogens in the water. Mr McGovern hopes to put in place a distribution system with a commercial interest in providing the machines and selling the filters. Volunteers and NGOs, he says, tend to set things up and then move on; a local commercial incentive is needed to sustain the operation, even if subsidies are required to get it started. Fortunately, two Mexican organisations have already promised grants, and the project is backed by the country's popular first lady, Margarita Zavala.

[<http://www.economist.com/node/16136260>]

Document 8

Adapted from 'Are we all doomed?'

An article on the website of a UK-based libertarian think tank, 3 March 2010 Dr Madsen Pirie

The annual investment forum in Tokyo of Credit Lyonnais Securities Asia has heard a grim forecast from Dr Marc Faber, a market analyst with some success at forecasting crises. Universally pessimistic, he is dubbed "Dr Doom" by the industry.

He ventures beyond market conditions to warn us of a coming "dirty war" which will shut down the internet and mobile phones, and see city water supplies being poisoned. He advises buying farmland and living rurally to escape the violence and biological attack which will afflict cities. He also suggests buying gold and precious metals "because they can be carried." In Asia he advises buying into agriculture and water treatment to play on future food and water shortages.

Chilling stuff, but will it happen? Doomsayers don't have a very good record. Humanity seems to muddle through despite the catastrophes so regularly predicted. Part of the reason is that we alter our behaviour to avoid them. We develop new technologies such as those which enabled the "green revolution" to avoid the threatened starvation. We will not all choke on the nightmare levels of pollution forecast because we are constantly developing ways of dealing with it and avoiding it. We haven't all died yet in a nuclear holocaust because we changed the way we behave once nuclear weapons entered the frame.

This is not to say Dr Faber is wrong – although I believe he is. It is just that he, like other doom-speakers, downplays what Julian Simon called "The Ultimate Resource," the creative ingenuity of humankind. Despite the gloomy forecasts that civilization would be wiped out by a new ice age, a population time bomb, a silent spring, or the depletion of scarce resources, we have proved quite adaptable and quite resourceful at dealing with problems.

I doubt Dr Faber's hedge fund audience will all rush to take his advice. Maybe a few will hedge their bets by buying just a little farmland and just a little gold. The rest of us will probably bet on humanity again, rather than disaster.

[<http://www.adamsmith.org/blog/misc/are-we-all-doomed%3f/>]

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